

ABSTRACT

HERMETIC SEALING OF OPTICAL MODULES

[0047] A hermetically sealable package may be formed from a top portion and a bottom portion mated along a seam at or near a plane of an optical fiber. A completed pill assembly may be positioned directly into the enclosure base without requiring the fiber to be threaded through the feed through or "snout". The top portion may then be mated with the bottom portion to form the package. A glass solder ring may be placed coaxial with the fiber in the feed through. The seam may be sealed by laser welding and the glass solder ring reflowed by laser heating, for example, with a same laser as used to weld the seam or by resistive or induction heating. In some embodiments a coupling tube around the fiber and snout or the snout itself may have holes to allow solder sealing within the snout and filling the remaining area with epoxy. Since the package is initially split in two pieces, module assembly may be facilitated without threading.